DATASHEET
FUJITSU PRIMERGY TX200 S6 SERVER

WELL-BALANCED PRICE- PERFORMANCE

PRIMERGY TX industry standard tower servers: efficient, rock solid, record-breaking performance. PRIMERGY TX servers benefit from over 20 years pioneering work in the field of Green IT. That is how TX servers reach industry – leading performance per watt ratios, lowering the environmental impact and running costs. TX servers can easily be managed via the free of charge PRIMERGY ServerView Suite, saving IT admin costs. That's efficient performance. Our made-to-measure service packages take care of your system every step of the way. Rest assured, PRIMERGY TX servers are put through 5000 boot cycles - that's rock solid performance. PRIMERGY TX servers are flexible systems capable of using up to two processors and up to 20 hard disks. Tower to rack mounting kits are available for most TX systems to help you move to a consolidated rack infrastructure. TX servers have a tradition of setting record-breaking performance levels. So, whether you use them as tower or rack servers, for file, print or application purposes, you will benefit from record-breaking performance. PRIMERGY TX: a tower of strength.

PRIMERGY TX200 S6

The PRIMERGY TX200 S6 is a perfect server for small or decentralized infrastructures in an attractive family design. The PRIMERGY TX200 S6 offers expandability, energy efficiency and dual processor performance. With up to 16 2.5" hard disks, you can save on an external storage unit. The high energy efficiency minimizes costs. Moreover, a maximum of 96GB of RAM, redundancy features, and the performance of up to two Intel® Xeon® processors 5600 series allow you to make a great start into virtualization. The PRIMERGY TX200 S6 also lends itself as a departmental, email or web server. A tower to rack conversion kit protects your investment's lifetime. This great system strikes the right balance between price and performance.

FEATURES AND BENEFITS

MAIN FEATURES	BENEFITS
■ Intel® Xeon® Processor 5600 Series with up to 6 core operation (up to 12 threads per socket with Hyper Threading), 12 MB shared cache, Internal Memory Management Unit (3 channels of DDR3 memory) and Intel® Turbo Boost Optimization	■ Higher overall productivity with leading-edge technology and the performance of up to two processors!
■ Up to 96GB RAM configurable in independent, mirrored, spare or performance modes	■ Plenty of memory configurable to suit your every need: file, print, database or virtualization server
■ Hot-plug power supply with 92% efficiency (85% efficiency for standard power supply)	■ Save energy costs and minimize the environmental impact
■ Up to 4 (6 optional) 3,5" hard disks or 8 (16 optional) 2,5" SAS or SATA hard disk drives and 6 expansion slots (4 PCIe Gen 2, 1 PCIe, 1 PCI)	■ Choose among a range of expansion variables to suit your budget and requirements.
■ Hot-plug hard disks included as standard, plus optional: hot-plug redundant power supply units or redundant fans or ServerView Local Service Panel (LSP).	■ Tailor made availability, offering the security level you need.

TECHNICAL DETAILS

MAINBOARD	
Mainboard type	D 2799
Chipset	Intel® 5500
Processor quantity and type	1 - 2 x Intel® Xeon® processor E5500 series / Intel® Xeon® processor E5600 series / Intel® Xeon® processor L5600 series / Intel® Xeon® processor X5600 series
PROCESSOR	Intel® Xeon® processor E5503 (2C/2T, 2.00 GHz, SLC: 4 x 256 KB, TLC: 4 MB, Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
	Intel® Xeon® processor E5506 (4C/4T, 2.13 GHz, SLC: 4 x 256 KB, TLC: 4 MB, Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
	Intel® Xeon® processor E5507 (4C/4T, 2.26 GHz, SLC: 4 x 256 KB, TLC: 4 MB, Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
	Intel® Xeon® processor E5620 (4C/8T, 2.40 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 80 W)
	Intel® Xeon® processor E5630 (4C/8T, 2.53 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 80 W)
	Intel® Xeon® processor E5640 (4C/8T, 2.66 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 80 W)
	Intel® Xeon® processor L5609 (4C/4T, 1.86 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 40 W)
	Intel® Xeon® processor L5630 (4C/8T, 2.13 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 40 W)
	Intel® Xeon® processor L5640 (6C/12T, 2.26 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 2/2/3/3/4/4, 6.4 GT/s, Mem bus: 1333 MHz, 60 W)
	Intel® Xeon® processor X5650 (6C/12T, 2.66 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 2/2/2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)
	Intel® Xeon® processor X5660 (6C/12T, 2.80 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 2/2/2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)
	Intel® Xeon® processor X5670 (6C/12T, 2.93 GHz, SLC: 4 x 256 KB, TLC: 12 MB, Turbo: 2/2/2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)
Memory slots	12 (6 DIMMs per CPU, 3 channels with 2 slots per channel)
Memory slot type	DIMM (DDR3)
Memory capacity (min. - max.)	2 GB - 96 GB
Memory protection	Advanced ECC Memory Scrubbing SDDC (Chipkill™) Hot-spare memory support Memory Mirroring support
Memory notes	max. 96 GB registered, min. 2 GB unbuffered; memory mirroring with 2 identical modules, hot-spare memory with three identical modules per channel
MEMORY MODULES INDEPENDENT MODE	2 GB (1 module(s) 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM
	2 GB (1 module(s) 2 GB) DDR3 LV, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM
	4 GB (1 module(s) 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	4 GB (1 module(s) 4 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
	8 GB (1 module(s) 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	8 GB (1 module(s) 8 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
MEMORY MODULES MIRRORED MODE	4 GB (2 module(s) 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	8 GB (2 module(s) 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	8 GB (2 module(s) 4 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
	16 GB (2 module(s) 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	16 GB (2 module(s) 8 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM

MEMORY MODULES SPARE OR PERFORMANCE MODE	6 GB (3 module(s) 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	12 GB (3 module(s) 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	12 GB (3 module(s) 4 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
	24 GB (3 module(s) 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600, DIMM
	24 GB (3 module(s) 8 GB) DDR3 LV, registered, ECC, 1333 MHz, PC3-10600, DIMM
INTERFACES	
USB ports	10 x USB 2.0 (3x front USB, 4x rear USB 3x internal for backup, USSD and internal USB)
Graphics (15-pin)	1 x VGA
Serial 1 (9-pin)	1 x serial RS-232-C (9 pin), usable for iRMC S2 or System or common use
Serial 2 (9-pin)	1 x serial RS-232-C (9 pin), optional - occupies an unused slot
LAN / Ethernet (RJ-45)	1 x Gbit/s Ethernet (Intel Hartwell)
Service LAN (RJ45)	1 x dedicated Service LAN port for iRMC (10/100 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port
ONBOARD OR INTEGRATED CONTROLLER	
SATA Controller	ICH10R, 6-port SATA (4x for internal hard disks, 2x for accessible drives)
SATA Controller type notes	On board SATA controller supports RAID levels 0, 1, 10
Remote Management Controller	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / separate module; TCG V1.2 compliant (option)
SLOTS	
PCI-Express 2.0 x4 (mech. x8)	2 x full height (1x long, 1x short)
PCI-Express 2.0 x8	2 x full height (1 slot is notched. It is therefore also usable for x16 cards operating in x8 mode).
PCI-Express x4 (mech. x8)	1 x full height
PCI slots	1 x
Slot Notes	PCI slot: 32-bit / 33 MHz, 5 V; in SAS-configurations 1x PCI-Express slot is occupied by the modular RAID-Controller
DRIVE BAYS	
Hard disk bay configuration	4x 3.5-inch, for SAS / SATA or 8x 2.5-inch for SAS/SATA optional
Accessible drive bays	3 x 5.25/1.6-inch
Notes accessible drives	All possible options described in relevant system configurator.
Optional hard disk bays	2 x 3.5-inch hot-plug SAS/SATA or 8x 2.5-inch hot-plug SAS in HDD box (occupies 2x 5.25-inch bays)
FAN CONFIGURATION	
Fan configuration	2 standard fans or 2 redundant fans (only available in combination with hot plug redundant power supply)
OPERATING PANEL	
Operating buttons	On/off switch NMI button Reset button
Status LEDs	System status (amber / yellow) Identification (blue) Hard disks access (green) Power (amber / green) At system rear side: System status (amber / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)
Service display	Optional: ServerView Local Service Panel (LSP)
BIOS	
BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support

CERTIFIED OR SUPPORTED OPERATING SYSTEMS	
Certified or supported operating systems	Microsoft® Windows Server® 2008 R2 (containing Hyper-V) Microsoft® Windows Server® 2003 R2 Novell SUSE Linux Enterprise Server Red Hat Enterprise Linux VMware Infrastructure VMware vSphere 4.1 Note: Support of other Linux derivatives on demand
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421
SERVER MANAGEMENT	
Standard	PDA Prefailure Detection and Anaylsis ASR&R Automatic Server Recovery and Restart ServerView Suite: SV Installation Manager SV Operation Manager SV RAID Manager SV Update Management SV Power Management SV Agents Online update packages for BIOS, firmware drivers and ServerView Agents ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris Deployment Solution ServerView Deployment Manager (fully functional 30-day trial version) ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris Deployment Solution ServerView Deployment Manager (fully functional 30-day trial version)
Option	ServerView Integration for Tivoli TEC®, Tivoli NetView, HP NNM and HP Operations Manager iRMC S2 Advanced Pack
Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.
DIMENSIONS / WEIGHT	
Floor-stand (W x D x H)	205 (306) x 584 x 444 mm
Rack (W x D x H)	482 x 570 x 220 mm
Dimension notes	Floorstand Width 306 mm with tilt protection; depth measured excludes handles on redundant PSU. Rack depth excludes handles of redundant PSU and rack front.
Mounting Depth Rack	596 mm
Height Unit Rack	5 U
Weight	up to 36,8 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option
ENVIRONMENTAL	
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	34 dB(A) (idle) / 36 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	5.2 B (idle) / 5.7 B (operating)
Noise notes / description	measured with standard fans and PSU
Operating ambient temperature	10 - 35°C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation locations)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
ELECTRICAL VALUES	
Power supply configuration	1x standard, 1x hot-plug or 2x redundant
Max. output of single power supply	685 W
Standard power supply output	700 W (85% efficiency)
Hot-plug power supply output	800 W (92% efficiency)
Hot-plug power supply redundancy	Yes
Rated voltage range	100 - 240 V
Rated frequency range	47 - 63 Hz
Rated current max.	9.5 - 4.0A
Rated current in basic configuration	1,3 0.6A

ELECTRICAL VALUES	
Active power (min. configuration)	111 W
Active power (max. configuration)	461 W
Apparent power (max. configuration)	490 VA
Heat emission	1659.6 kJ/h (1573.0 BTU/h)
Power Supply Notes	In case of using an UPS we recommend to select a 1500VA/1000 W type as a minimum, because high power peaks might be possible when switching over to battery!

COMPLIANCE	
Germany	TÜV GS
Europe	CE Class A *
USA/Canada	CSAc/us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)
Japan	VCCI Class A + JIS 61000-3-2
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request. * Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

COMPONENTS

HARD DISK DRIVES
SSD SATA, 3 Gb/s, 64 GB, SLC, hot-plug, 2.5-inch, enterprise
SSD SATA, 3 Gb/s, 32 GB, SLC, hot-plug, 2.5-inch, enterprise
HDD SATA, 3 Gb/s, 750 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
HDD SATA, 3 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
HDD SATA, 3 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
HDD SATA, 3 Gb/s, 320 GB, 5400 rpm, hot-plug, 2.5-inch, economic
HDD SATA, 3 Gb/s, 250 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
HDD SATA, 3 Gb/s, 160 GB, 7200 rpm, hot-plug, 3.5-inch, economic
HDD SATA, 3 Gb/s, 160 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
HDD SATA, 3 Gb/s, 160 GB, 5400 rpm, hot-plug, 2.5-inch, economic
HDD SATA, 3 Gb/s, 2 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
HDD SATA, 3 Gb/s, 1 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
HDD SAS, 6 Gb/s, 600 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
HDD SAS, 6 Gb/s, 450 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
HDD SAS, 6 Gb/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 146 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 6 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
HDD SAS, 3 Gb/s, 146 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise

TAPE DRIVES	DDS Gen5, 36 GB, 3 MB/s, half height, USB 2.0
	DDS Gen6, 80 GB, 6 MB/s, half height, USB 2.0
	LTO2HH Ultrium, 200 GB, 24 MB/s, half height, SAS 3Gb/s
	LTO3HH Ultrium, 400 GB, 60 MB/s, half height, SAS 3Gb/s
	LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 3Gb/s
	LTO5HH Ultrium, 1500 GB, 140 MB/s, half height, SAS 6Gb/s
	RDX Drive, 80 GB, 160 GB, 320 GB, 500 GB, 25 MB/s, half height, USB 2.0
OPTICAL DRIVES	Blu-ray Disc™ Combo Drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	DVD-ROM, (16xDVD; 48xCD), half height, SATA I
	DVD Super Multi, (16xDVD, 8xDVD+RW 6xDVD-RW, 12xDVD-RAM; 48xCD, 32xCD-RW), half height, SATA I
	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
SCSI / SAS CONTROLLER	SCSI Ctrl. 320 MB 1ch int/ext PCIe x1
	SAS Ctrl. 3 Gb 4 ports int. / 4 ports ext. PCIe x4
RAID CONTROLLER	RAID 5/6 Ctrl., HDD SAS 6 Gb, LSI , 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)
	Integrated RAID 5/6 Ctrl., HDD SAS 6 Gb, Fujitsu , 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)
	Integrated RAID 0/1 Ctrl., SAS/SATA 6 Gb, Fujitsu , 8 ports int. RAID level: 0, 1, 10, no BBU support (based on LSI SAS2008)
	Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 8 ports int. RAID level: 0, 1, 1E, no BBU support (based on LSI 1068e)
	Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 4 ports int. RAID level: 0, 1, 1E, no BBU support , for internal SAS tapes (based on LSI 1064e)
FIBRE CHANNEL CONTROLLER	Fibre Channel Host Bus Adapter 1 x 4 Gb Emulex LPe1150 MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 4 Gb Emulex LPe11002 MMF LC-style
	Fibre Channel Host Bus Adapter 1 x 4 Gb Qlogic QLE2460 MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 4 Gb Qlogic QLE2462 MMF LC-style
	Fibre Channel Host Bus Adapter 2 x 8 Gb Emulex LPe12002 MMF LC-style
	Fibre Channel Host Bus Adapter 1 x 8 Gb Emulex LPe1250 MMF LC-style
LAN CONTROLLER	Ethernet Ctrl. 1 x 1 Gb Intel® Gigabit CT Desktop Adapter
	Ethernet Ctrl. 1 x 1 Gb Intel® PRO/1000 PF Server Adapter
	Ethernet Ctrl. 1 x 1 Gb Intel® PRO/1000 PT Server Adapter
	Ethernet Ctrl. 2 x 10 Gb Intel® Ethernet Server Adapter X520-DA2
	Ethernet Ctrl. 2 x 1 Gb Fujitsu Eth Ctrl 2x1Gbit PCIe x4 D2735 Cu
	Ethernet Ctrl. 2 x 1 Gb Intel® PRO/1000 PT Dual Port Server Adapter
	Ethernet Ctrl. 4 x 1 Gb Fujitsu Eth Ctrl 4x1Gbit PCIe x4 D2745 Cu
RACK INFRASTRUCTURE	Cable Arm 2U for 3rd party racks
	Cable Management for 19-inch DataCenter / PRIMECENTER Racks
	Rackmount kit full extraction (760mm), tool less mounting

WARRANTY	
Standard Warranty	3 years
Service level	On-site Service (depending on country)
MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION	
Recommended Service	7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu PRIMERGY TX200 S6, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures
With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu PRIMERGY TX200 S6, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
http://ts.fujitsu.com/Primergy

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT.
Please find further information at http://www.fujitsu.com/global/about/environment/

COPYRIGHTS

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded.
Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.
For further information see http://ts.fujitsu.com/terms_of_use.html
Copyright © Fujitsu Technology Solutions

DISCLAIMER

Technical data are subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner

CONTACT
FUJITSU LIMITED
Mies-van-der-Rohe-Straße 8
80807 München
Germany
Website: www.ts.fujitsu.com
2010-10-06 CE-EN